

REMARKS

The Official Action mailed June 23, 2009, has been received and its contents carefully noted. This response is filed within three months of the mailing date of the Official Action and therefore is believed to be timely without extension of time. Accordingly, the Applicant respectfully submits that this response is being timely filed.

The Applicant notes with appreciation the consideration of the Information Disclosure Statements filed on August 1, 2006, July 24, 2007, and October 22, 2007.

Claims 1-17 are pending in the present application, of which claims 1-12 are independent. Claims 2, 4, 6, 8, 10 and 12 are withdrawn from consideration by the Examiner. Accordingly, claims 1, 3, 5, 7, 9, 11 and 13-17 are pending in the present application, of which claims 1, 3, 5, 7, 9 and 11 are independent. For the reasons set forth in detail below, all claims are believed to be in condition for allowance. Favorable reconsideration is requested.

Paragraph 2 of the Official Action rejects claims 1, 3, 5, 7, 9, 11 and 13-17 under 35 U.S.C. § 112, second paragraph, asserting that the claims are "indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention" (page 2, Paper No. 20090621). The Official Action further asserts that the recitation of "wherein each of the first and second memory elements ... can transit only from the low state to the high state by applying at least a voltage or a current" contradicts the recitation "wherein the memory cell stores 1-bit data by using a (L, H) state that the first memory element is in the low state and the second memory element is in the high state and a (H, L) state that the first memory element is in the high state and the second memory element is in the low state" (*Id.*). The Applicant respectfully disagrees and traverses the above assertions of the Official Action. One of ordinary skill in the art would, reading the claims in their entirety and in view of the specification, readily understand that the claims do not recite a transition from a (L, H) state to a (H, L) state but instead recite that 1-bit data is stored with the occurrence of either state.

That is, in the present invention, the states of the first and second memory elements are either a state that transits from (L, L) to (H, L) and then to (H, H), or a

state from (L, L) to (L, H) and then (H, H). However, (H, L) and (L, H) do not transit to each other, resulting in a high security non volatile memory in which data once written cannot be reprogrammed. See paragraphs [0010] and [0017] of the published specification. Hence, the nonvolatile memory can store data by using only states (H, L) corresponding to data "1" and (L, H) corresponding to data "0" that cannot be electrically transited to each other among combinations that can be obtained in the memory unit. See paragraphs [0009] and [0053] of the specification.

In any event, the Applicant has amended the claims to clarify this feature of the present invention by reciting "wherein the memory cell stores 1-bit data by using a (L, H) state that the first memory element is in the low state and the second memory element is in the high state [[and]] or a (H, L) state that the first memory element is in the high state and the second memory element is in the low state." The Applicant respectfully submits that amended claims 1, 3, 5, 7, 9, 11 and 13-17 particularly point out and distinctly claim the subject matter which applicant regards as the invention and are definite. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 112 are in order and respectfully requested.

The Commissioner is hereby authorized to charge fees under 37 C.F.R. §§ 1.16, 1.17, 1.20(a), 1.20(b), 1.20(c) and 1.20(d) (except the Issue Fee) which may be required now or hereafter, or credit any overpayment to Deposit Account No. 50-2280.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,


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